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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,842

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Hans Helmut Bechtel

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
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EXAMINER

PATEL, ASHOK

ART UNIT

PAPER NUMBER

2879

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/26/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/518,842

Applicant(s)

BECHTEL ET AL.

Examiner

Ashok Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2 and 11 is/are allowed.
- 6) ☒ Claim(s) 3-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>1 page</u> . | 6) <input type="checkbox"/> Other: _____  |

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1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the laminated body bordering on the substrate and the colloidal layer borders on the laminated body. must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and

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informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. Applicant's arguments with respect to claims 3-10 have been considered but are moot in view of the new ground(s) of rejection.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 3-6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tada et al (USPN 6734624, of record).

Tada disclose applicant's claimed electroluminescent (EL) device (at least Figures 5-9) including a substrate (500, 600, 700, 900), a colloidal layer (601, 701, 901/902) and a laminated body composed of a first electrode (501, 602, 702, 903), an

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electroluminescent layer (503, 604, 703, 904) and a second electrode (504, 605, 704, 905).

Tada et al do not disclose the laminated body bordering on the substrate and the colloidal layer bordering on the laminated body. However altering the location of the colloidal layer and the laminated body would have been obvious alternative design to one of ordinary skill in the art since either arrangement would yield similar optical results. Alternatively, since applicant's claimed arrangement of providing the laminated body bordering on the substrate and the colloidal layer bordering on the laminated body does not solve any particular problem that is not solved by prior art arrangement of the same, applicant's claimed arrangement of laminated body and the colloidal layer would have been a matter of obvious design choice to one of ordinary skill in the art.

As to claim 4, Tada et al disclose the colloidal layer containing a material of metal oxide and  $\text{SiO}_2$ .

As to claim 5, Tada et al disclose the material having particles size of 280 nm (col. 10, Example 15; claims 6, 7, 9, 10) that satisfies applicant's claimed range of between 1 and 400 nm.

As to claim 6, Tada et al do not appear to disclose the colloidal layer being a pixelated layer. However, providing the colloidal layer in the pixelated form would have been obvious to

one of ordinary skill in the art for enhancing contrast of the electroluminescent device or selectively modifying optical properties of the emitted light. Therefore, it would have been obvious to one of ordinary skill in the art to provide Tada et al's electroluminescent device including colloidal layer in pixilated form for enhancing contrast of the electroluminescent device or selectively modifying optical properties of the emitted light.

As to claim 10, providing the pixelated electroluminescent layer is known in the art for producing light selectively from a desired pixel or pixels. Therefore, it would have been obvious to one of ordinary skill in the art to provide Tada et al's EL device including electroluminescent layer pixilated for producing light selectively from a desired pixel or pixels.

5. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tada et al in view of Tomoike et al (USPN 6464898, of record).

As to claims 7 and 8, Tada et al do not disclose the pigments, as claimed by applicant. Although the use of pigments is known in the art of electronic EL device for producing desired color light from the device, Tomoike et al is cited for showing color pigments (col. 2, lines 19-67; col. 3, lines 39-45 etc.).

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Therefore, it would have been obvious to one of ordinary skill in the art to provide Tada et al's device including (color) pigments for producing desired color.

As to claim 9, Tada et al do not disclose the EL device emitting white light. However, Tomoike et al disclose the color pigments emitting white light from the device (col. 20, lines 29-32). Therefore, it would have been obvious to one of ordinary skill in the art to provide the EL device including color pigments for emitting white light from the device.

6. Claims 1, 2 and 11 are allowed in view of applicant's amendment of claim 1. Prior art of the record does not disclose applicant's claimed EL device including a substrate, a colloidal layer, a laminated body composed of first electrode, an electroluminescent layer and a second electrode, as specifically recited in claim 1, wherein the colloidal layer includes a varying refractive index.

7. The Examiner responds to applicant's arguments as follows.

As to objections to the drawings, applicant argues that it is not necessary to provide the drawings, as one skilled in the art would clearly recognize the structure of the combination of

elements. The Examiner disagrees since the structure of EL device recited in claim 3 is quite different from that of claim 1 or 6.

As to rejection of claim 3, applicant argues that applicant's specification clearly sets forth advantageous result of the claimed EL device. The Examiner disagrees. At page 5, the specification refers to "an actively driven" EL device including the laminated body bordering on the substrate and the colloidal layer bordering on the laminated body which results into the advantage. Since applicant's claimed device is not directed to an actively driven EL device, applicant's argument is moot.

As to claim 6, an EL device with a pixelated configuration is known in the art for providing light from a selected portion of the device instead of from the entire device. This would provide a desired contrast effect by modifying light that emits only through pixelated colloidal elements instead of entire colloidal layer.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened




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statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok Patel whose telephone number is 571-272-2456. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**Ashok Patel**  
**Primary Examiner**